What is claimed is:

Claims

1. A method comprising the steps of:

sending one or more upstream signals as pulse code modulated data without packet headers using an upstream cable protocol; and

sending one or more downstream signals as pulse code modulated data without packet headers using a downstream cable protocol.

2. The method of claim 1, wherein the upstream protocol is DOCSIS, Data-Over-Cable System Interface Specification.

3. The method of claim 1, wherein the step of sending one or more upstream signals comprises mapping one or more pulse code modulated samples of the one or more signals taken at a sampling interval to an allocation of mini-slots in the upstream protocol.

4. The method of claim 3, wherein the sampling interval is 125 microseconds and the mini-slots occur at 6.25 microsecond intervals.

5. The method of claim 1, further comprising the step of multiplexing two or more signals in one mini-slot in the upstream protocol.

6. The method of claim 1, wherein the downstream protocol is DOCSIS, Data-Over-Cable System Interface Specification.

7. The method of claim 1, wherein the step of sending one or more downstream signals comprises mapping one or more pulse code modulated samples of the one or more signals taken at a sampling interval to a Motion Pictures Experts Group (MPEG) transport layer.

8. The method of claim 1, wherein the step of sending one or more downstream signals comprises multiplexing multiple signals within a single Motion Pictures Experts Group (MPEG) packet identifier.

9. The method of claim 1, wherein the method is performed in a cable system having a media terminal adapter (MTA), such that subscriber signalling functionality is reduced in the MTA.

10. The method of claim 1, wherein the method reduces throughput delay and jitter for signals, thereby improving signal quality over existing transport methods.

11. The method of claim 1, wherein at least one of the one or more upstream signals and the one or more downstream signals is a voice signal.

12. The method of claim 1, wherein at least one of the one or more upstream signals and the one or more downstream signals is a video signal.

Amended Sheet

13. A method comprising the steps of:

sampling one or more signals at a sampling interval, yielding pulse code modulated (PCM) data; and

transporting the PCM data without packet headers over a cable media using an upstream cable protocol.

14. The method of claim 13, wherein the upstream protocol is DOCSIS, Data-Over-Cable System Interface Specification.

15. The method of claim 13, wherein the step of sampling the one or more signals comprises mapping each byte of pulse code modulated data to one of a plurality of mini-slots in the upstream protocol.

16. The method of claim 15, wherein the sampling interval is 125 microseconds and each of the plurality of mini-slots occurs at 6.25 microsecond intervals.

17. The method of claim 13, further comprising the step of multiplexing two or more signals in one mini-slot in the upstream protocol.

18. The method of claim 13, wherein the method reduces throughput delay and jitter for signals, thereby improving signal quality over existing transport methods.

19. The method of claim 13, wherein at least one of the one or more signals is a voice signal.

20. The method of claim 13, wherein at least one of the one or more signals is a voice signal.

21. A method comprising the steps of:

providing one or more signals at a sampling interval, yielding pulse code modulated (PCM) data; and

transporting the PCM data without packet headers over a cable media using a downstream cable protocol.

22. The method of claim 21, wherein the downstream protocol is DOCSIS, Data-Over-Cable System Interface Specification.

23. The method of claim 21, wherein the step of providing the one or more signals comprises mapping each byte of pulse code modulated data to a Motion Pictures Experts Group (MPEG) transport layer.

24. The method of claim 21, wherein the step of providing the one or more signals comprises multiplexing multiple signals within a single Motion Pictures Experts Group (MPEG) packet identifier.

25. The method of claim 21, wherein the method reduces throughput delay and jitter for signals, thereby improving signal quality over existing transport methods.

26. The method of claim 21, wherein at least one of the one or more signals is a voice signal.

27. The method of claim 21, wherein at least one of the one or more signals is a voice signal.

28. An apparatus comprising:

a sampler, arranged and constructed to sample one or more signals at a sampling interval, yielding pulse code modulated (PCM) data; and

a transport device, arranged and constructed to transport the PCM data without packet headers over a cable media using an upstream cable protocol.

29. The apparatus of claim 28, wherein the upstream protocol is DOCSIS, Data-Over-Cable System Interface Specification.

30. The apparatus of claim 28, wherein the step of sampling the one or more signals comprises mapping each byte of pulse code modulated data to one of a plurality of mini-slots in the upstream protocol.

31. The apparatus of claim 30, wherein the sampling interval is 125 microseconds and each of the plurality of mini-slots occurs at 6.25 microsecond intervals.

32. The apparatus of claim 28, further comprising a multiplexor for multiplexing two or more signals in one mini-slot in the upstream protocol.

33. The apparatus of claim 28, wherein the apparatus reduces throughput delay and jitter for signals, thereby improving signal quality over existing transport methods.

34. The apparatus of claim 28, wherein at least one of the one or more signals is a voice signal.

35. The apparatus of claim 28, wherein at least one of the one or more signals is a voice signal.

36. The apparatus of claim 28, wherein the apparatus is part of a media terminal adapter.